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AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) A computer implemented system for transferring data over a master driven TDD/TDMA based wireless network characterized in that it operates with minimum delay in end-to-end transmission by including:
[[-]] means for achieving optimum time slot utilization by minimizing the number of baseband packets created for each Link layer packet, each baseband packet being of a size corresponding to one of a permitted set of capacities 'C1, C2,.....Cn', and
[[-]] means for optimum sharing of bandwidth, higher link utilization and low baseband packet transmission queue occupancy by adaptive scheduling of the transmission of said baseband packets in said queues.
2. (Currently Amended) A system as claimed in claim 1, wherein said means for minimizing the number of baseband packets created for said each Link layer packet is an SAR-OSU algorithm comprising converting said Link layer packet into as many baseband packets of highest capacity 'Cn' as possible and repeating ~~the a~~ conversion process on the unconverted bytes using each successive lower capacity baseband packet size until all the unconverted bytes have been converted into said baseband packets.
3. (Currently Amended) A system as claimed in claim 1, wherein said master driven TDD/TDMA based wireless network ~~is~~ comprises a Bluetooth network and said Link layer packet ~~is~~ comprises a L2CAP packet.
4. (Original) A system as claimed in claim 1, wherein said means for adaptive scheduling of transmission is an 'AFP' algorithm whereby a baseband packet transmission queue with a size greater than a defined threshold is continuously polled for a defined number of transmissions as long as its size remains greater than said defined threshold.

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5. (Currently Amended) A system as claimed in claim 1 further comprising means for increasing the transmission polling interval for a baseband packet transmission queue with low packet traffic, such as when a 'poll' packet is sent instead of a 'data' packet.
6. (Currently Amended) A computer implemented method for transferring data over a master driven TDD/TDMA based wireless network characterized in that it operates with minimum delay in end-to-end transmission by:
- [[-]] achieving optimum time slot utilization by minimizing the number of baseband packets created for each Link layer packet, each baseband packet being of a size corresponding to one of a permitted set of capacities 'C1, C2, Cn', and
 - [[-]] maintaining optimum sharing of bandwidth, higher link utilization and low baseband packet transmission queue occupancy by adaptive scheduling of the transmission of said baseband packets in said queues.
7. (Currently Amended) A method as claimed in claim 6, wherein said minimizing of the number of said baseband packets created for said each Link layer packet is by an SAR-OSU algorithm comprising converting said Link layer packet into as many baseband packets of highest capacity Cn as possible and repeating the a conversion process on the unconverted bytes using each successive lower capacity baseband packet size until all the unconverted bytes have been converted into said baseband packets.
8. (Currently Amended) A method as claimed in claim 6, wherein said master driven TDD/TDMA based wireless network is comprises a Bluetooth network and said Link layer packet is comprises a L2CAP packet.
9. (Original) A method as claimed in claim 6, wherein said adaptive scheduling of transmission is by an 'AFP' algorithm whereby a queue with a size greater than a defined

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threshold is continuously polled for a defined number of transmissions as long as its size remains greater than said defined threshold.

10. (Currently Amended) A method as claimed in claim 6 further comprising increasing the transmission polling interval for a baseband packet transmission queue with low packet traffic; ~~such as~~ when a 'poll' packet is sent instead of a 'data' packet.

11 (Currently Amended) A computer program product comprising computer readable program code stored on computer readable storage medium embodied therein for causing a computer to transfer data over a master driven TDD/TDMA based wireless network characterized in that it operates with minimum delay in end-to-end transmission by including:
[[-]] a computer readable program code ~~means configured for~~ adapted to achieving optimum time slot utilization by minimizing the number of baseband packets created for each Link layer packet, each baseband packet being of a size corresponding to one of a permitted set of capacities 'C1, C2,.....Cn', and

[[--]] a computer readable program code ~~means configured for~~ adapted to implementing optimum sharing of bandwidth, higher link utilization and low baseband packet queue occupancy by adaptive scheduling of the transmission of said baseband packets in said queues.

12. (Currently Amended) A computer program product as claimed in claim 11, wherein said computer readable program code ~~means configured for~~ adapted to minimizing the number of baseband packets created for said each L2CAP Link layer packet is an SAR-OSU algorithm comprising converting said L2CAP Link layer packet into as many baseband packets of highest capacity Cn as possible and repeating ~~the a~~ conversion process on ~~the~~ unconverted bytes using each successive lower capacity baseband packet size until all the unconverted bytes have been converted into said baseband packets.

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13. (Currently Amended) A computer program product as claimed in claim 11, wherein said master driven TDD/TDMA based wireless network is comprises a Bluetooth network, and said Link layer packet is comprises a L2CAP packet.

14. (Currently Amended) A computer program product as claimed in claim 11, wherein said computer readable program code ~~means configured for~~ adapted to adaptive scheduling for transmission is comprises an 'AFP' algorithm whereby a queue with a size greater than a defined threshold is continuously polled for a defined number of transmissions as long as its size remains greater than the defined threshold.

15. (Currently Amended) A computer program product as claimed in claim 11 further comprising a computer readable program code ~~means configured for~~ adapted to increasing the transmission polling interval for a baseband packet transmission queue with low packet traffic ~~such as~~ when a 'poll' packet is sent instead of a 'data' packet.